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## PHYTOREMEDIATION USING *Pistia stratiotes* L. IN THE TREATMENT OF EFFLUENT CONTAINING COPPER

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### Abstract

Aquatic macrophytes are an alternative in the treatment of effluents and have been shown to be a good option for the phytoremediation of chemical elements contained in domestic and industrial effluents. Phytoremediation is a technique that is easy to access and apply, widely used in contaminated environments. Thus, the present study aimed to evaluate the tolerance of the aquatic macrophyte *P. stratiotes* and quantify the concentrations of copper removed from synthetic effluent, with different initial concentrations of copper and contact times. The aquatic macrophytes were collected and transported to a greenhouse. The synthetic effluent was prepared to simulate an industrial effluent containing copper metal in increasing concentrations. The experiments were carried out in triplicate and the contact time evaluated was 14 days. The aquatic macrophyte was tolerant to copper with an average initial concentration of 2.68 mg L<sup>-1</sup>, removing the metal from the synthetic effluent, while for an average initial concentration of 10.29 mg L<sup>-1</sup> it was more sensitive in terms of tolerance, however, removed approximately 97.22 % of the metal in the synthetic effluent.

*Key words:* aquatic macrophyte, heavy metal, phytoremediation

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